# New Instrument Control Environment

From ICE to NICE

## Staffing

- Core
  - Chirag
  - Natasha
  - Frank
  - Brett
  - ?
- On loan
  - Paul Kienzel
  - Jeff Krzywon
  - Siddharth K
- Steering group
  - Brian Maranville
  - Matt Wasborough
  - William Ratcliff
  - Chris Stock
  - Andrew Jackson
- Upper management
  - Richard Ibberson
  - Dan Neumann

### Outline

- NICE Project Overview/History
- Project Management
- Review "Alpha" Project
- Alpha Project Status
- Future Development
- Quick Glance

## NICE Project Overview and History

- Code Freeze Started 6/10/2010
- NICE development started 11/9/2010
- Alpha Project Started 3/1/2011
- Goals
  - Improve Maintainability
  - Improve Extensibility
  - Replace Existing Data Acquisition Software

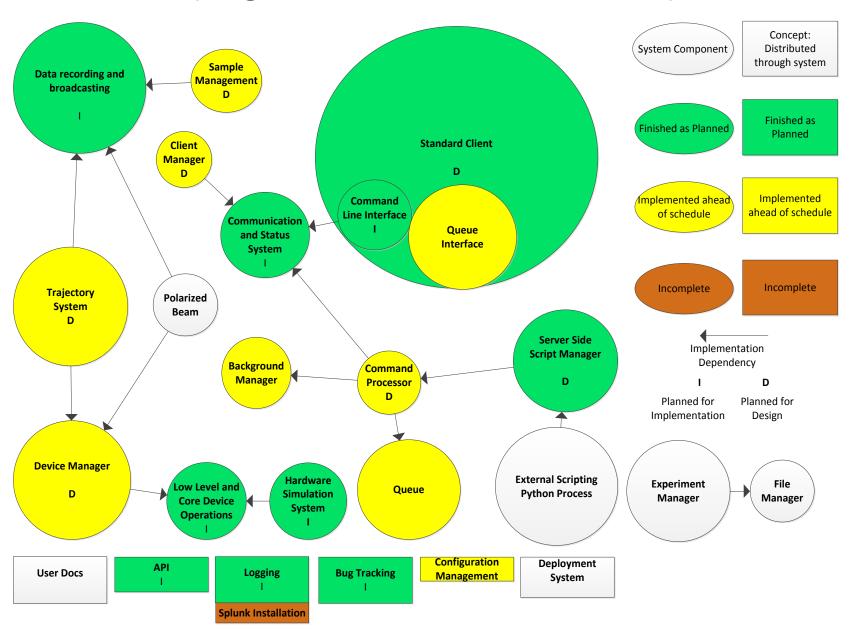
## **Project Management**

- Tier 1 Stephen Pheiffer
  - Makes decisions day to day
  - Oversees design
  - Recommends courses of action to steering group
  - Poses questions to steering group
- Tier 2 Steering Group
  - Meets ~bi-weekly
  - Monitors project progress
  - Dictates project requirements
  - Gives feedback on work
  - Sets priorities
- Tier 3 Upper Management
  - Sets high level facility goals
  - Coarsely Monitors project
  - Ensures Steering Group is working

## NICE Alpha Project Review

- What is it?
  - Early
  - Minimalistic
  - Non-production
- Goals
  - Lower risk
  - Get feedback earlier
  - Still be responsible
- Changes Risk Profile

# Alpha Deployed after 14 Months (original timeline 10-15 months)



### **Usability of Alpha**

(ready to run an experiment)

- Control of motors and counters (command line)
- Setup and execution of scans
- Command queue management and visualization
- Saving of data to existing data formats and HDF
- Open published API for specialized clients

#### **Future Plans**

- Core features
  - Finish temperature/magnet control
  - Experiment management
  - Math/sample calculations (Q, HKL, Energy, ...)
  - Many addition minor features
- GUI
  - Status panel
  - Alert/Notification System
  - Experiment setup tools
  - Sample Environment Management
- Internal work
- Bug Fixes
- User Manual (book at the instrument)

## Deployments

- Alpha (gathering feedback)
  - 10m SANS (deployed)
  - Simple Triple Axis (Late July 2012)
  - Spin Echo (Late August 2012 simulated feasibility study)
  - MAGIk (Late September 2012)
- Beta (useful for specialized projects)
  - 10m Sans (December 2012)
  - MAGIk (December 2012)
  - Simple Triple Axis (December 2012)
  - Spin Echo (November 2013?)
- Release (for everyday use)
  - Spin Echo (November 2013?)

## A Quick Glance

- Eclipse Environment
- VMs
- Continuous Integration
- Source Control
- Demo

## **END**